Implementation Team Meeting Notes

September 1, 2005

1. Greetings and Introductions.

The September 1 meeting of the Regional Forum Implementation Team was chaired by Jim Ruff and facilitated by Donna Silverberg. The following is a summary (not a verbatim transcript) of the topics discussed and decisions made at this meeting. Anyone with questions or comments about these notes should contact Kathy Ceballos at 503/230-5420.

2. Updates.

A. In-Season Management (TMT). Eric Braun said things are wrapping up at TMT; the in-season management period is now complete. Spill was stopped at the Lower Snake and Lower Columbia projects at midnight last night, except for the B2 corner collector, which was closed early yesterday, and Bonneville spill bays 1 and 18, which are spilling for adult attraction. Ice Harbor went outside MOP today; Little Goose will go out of MOP on September 8; Lower Monumental on about September 15. Libby ended August at elevation 2439.5; Hungry Horse, at elevation 3539.8; Grand Coulee, at elevation 1278; Dworshak, at elevation 1535.1. Dworshak is releasing 7.2 Kcfs; that operation will continue until about September 15, when the reservoir drafts to elevation 1522. Dworshak Inflow is currently only about 600 cfs. Once the project drafts to elevation 1522, outflow will be stepped down to an interim flow of about 4 Kcfs until elevation 1520 is achieved. At that point, said Braun, the project will go to minimum outflow, about 1.4 Kcfs.

How are the water temperatures at Lower Granite tailrace? Ruff asked. I think they're about 68 degrees F., Scott Bettin replied. The Lower Granite tailrace temperature has been running about 1 degree lower in 2005 than it was in 2004, John Palensky observed. Any information on the percentage of fish transported this year? Bettin asked. Not yet – we'll try to have that for you next time, Braun replied.

B. Independent Scientific Advisory Board (ISAB). No report.

C. Water Quality Team (WQT). No report.

D. System Configuration Team (SCT). See agenda item 4, below.

E. FCRPS Litigation. No report until after September 14.

3. RM&E Issues.

A. Presentation on Lamprey Work Plan. Tom Iverson said he would be presenting an update on the work of the lamprey technical work group, which is addressing process issues. Recall that I came to IT about 6 months ago to let you know there was a functional lamprey technical work group, he said; at that time, we had not yet approved the lamprey critical uncertainties document. There is a subcommittee of the CBFWA anadromous fish group that addresses lamprey issues, he explained; last winter, the subgroup held a workshop to try to prioritize the critical uncertainties for lamprey, to help guide funding decisions. The idea was that this document would be updated every couple of years, but would attempt to lay out a pathway to successful lamprey conservation over the next 20 years. That critical uncertainties document has now been endorsed by the CBFWA membership; if CBFWA ranks projects in the next Bonneville process, the list will be the basis for their ranking of lamprey projects. The lamprey work group is also intending to help evaluate work plans and to disseminate technical information, Iverson added.

We identified and prioritized 7 critical uncertainties, Iverson continued; the two top priorities were lamprey status and passage. We have to know where the lamprey are and what their distribution is before we can get to how the populations are structured, he explained. With respect to passage, we know the lamprey are anadromous, and anything we can do for passage now would be beneficial. We have not yet prioritized conservation measures, because we don't know how important conservation actions in the Hood River are in comparison to, say, the Deschutes River, Iverson said. It's all pretty well laid out in this document, he added.

As we've been designing a selection process for BPA Fish & Wildlife proposals, we've been talking about where lamprey issues fit, observed Doug Marker. I think the lamprey technical work group would be a good fit for evaluating those proposals, Iverson replied. Are you talking about a systemwide perspective? Palensky asked. I think a systemwide approach makes sense, Marker replied. Won't a lot of the work be done in tributaries? Palensky asked. Those projects will likely be coordinated during the Columbia plateau review, Marker replied. It also makes sense from a coordination perspective, added Iverson. Palensky observed that funding for systemwide projects is pretty low, currently. And that's one of the things we're struggling with, Marker replied. How many subbasins do the lamprey exist in? Bettin asked. Most of them, Iverson replied; that's one of the questions we need to answer.

Dave Clugston (Corps) then provided a presentation titled "Lamprey Passage at Dams." Clugston touched on the following major topics:

- Adult lamprey passage – research ongoing in the Columbia basin since the 1990s, including passage studies (6 years of radio telemetry in the field).

Identified several primary obstacles to passage: entrances, entrance pools, serpentine weirs and the makeup water channel (MWC). Problems relate to lamprey attachment in dead-end areas and hydraulics.

- Ladders are designed for salmon (photos)
- Lamprey vs. salmon passage (photos) – is it possible to modify salmon ladders to allow better lamprey passage? Possibly.
- Adult lamprey passage needs
- Alternative lamprey passage system (LPS) schematic – includes PIT-tag detectors, resting pools/boxes with monitoring equipment, a trap and a collector at the bottom end of the ladder
- Functional system has been installed at the Bradford Island exit area – passed about 8,000 lamprey last year. Would like to install another system at the Bonneville north ladder, which is even more of a problem from a lamprey passage perspective, primarily due to high velocities.
- Modifications to existing ladders – rounding and smoothing corners, plates over gratings, avoid new passage dead ends, incorporate these features into all new modifications or construction.
- Adult salvage/dewatering procedures – operational changes (control timing and location of dewatering for salvage, ensure adequate time, gear and personnel available), diffuser grating changes to reduce stranding (survey gratings and evaluate opening size)
- Adult lamprey passage monitoring – passage mostly at night, some via other routes, affects counts; evaluating use of “half duplex PIT” detection systems to correct counts, dam-to-dam passage rates and passage efficiencies

Clugston said the lamprey work group has identified the following adult lamprey passage decisions:

- Install permanent MWC channel LPS at Bonneville Dam
- Address ladder entrance difficulties, including modified shad passage operations
- Replace diffuser grating to reduce straining
- Develop half-duplex PIT-tag monitoring system
- Prioritize efforts (type and location of work)
- Develop realistic passage goals

With respect to the passage work and ladder modifications, how would those projects get funded? Is it CRFM, or Fish and Wildlife Program funds? Ruff asked. Our experience has been that these projects would be funded through CRFM, although some of these are O&M issues, Clugston replied. Marker said Council staff has also been wondering where the intersection lies between the Council prioritization process and the SCT’s CRFM prioritization process, with respect to lamprey issues.

Moving on, Clugston touched on

- Juvenile lamprey passage: downstream passage evaluations in the late 1990s

and early 2000s. Most migrate at night, deep in the water column, below screens at powerhouse and into turbines. Some impingement problems on fish screens. No effect from simulated turbine passage. Problems with separating lamprey in JBS and transport for the percentage that passes that route. There is no effective tag available for needed studies.

- Even PIT tags are too large to insert into juvenile lamprey (photos)
- Thus, juvenile evaluations are not possible now – route-specific passage and survival, dam passage survival, reach survival
- Juvenile lamprey passage issues: need evaluations of actively-tagged juveniles for downstream passage; awaiting advances in tagging technology. The need to develop realistic passage goals, juveniles in JBSs, fish screening replacement are other issues.

Is it fair to say that, due to physiology and migration route, you don't feel that downstream passage is currently a problem for juvenile lamprey? Dave Statler asked. To a certain extent, but the main problem is the lack of an effective tag to study downstream passage success, Clugston replied.

In response to another question, Clugston said the fyke net studies of the late '90s and early '00s showed that over 70 percent of juvenile lamprey migrants pass the dams through either spill or the turbine units; studies show that juvenile lamprey experience little harm from turbine passage. Statler suggested that a follow-up "lamprey summit" may be useful now that a year has passed since the last such event; Clugston agreed that this would be a good idea. It was agreed that a second lamprey workshop could be scheduled some time in late fall or early winter.

Another participant noted that it is possible that RSW operation may be detrimental to lamprey passage; Clugston replied that that is unknown at this time. The group discussed the sharp decline in lamprey counts since the early 1980s; Ruff postulated that lamprey may be an indicator species for declining water quality conditions. The discussion turned to the lamprey's historic range; Bettin observed that lamprey are actually better swimmers than steelhead, because they can climb over waterfalls. Historically, lamprey have the largest range of any anadromous species. It was agreed that NMFS would send out the Corps' lamprey passage presentation to all IT members.

B. Update on Snake River Fall Chinook Study Plans. Braun said the main thing to report at today's meeting is that there have been problems getting all the right parties together to discuss this topic. A meeting has been scheduled for September 19. We're definitely planning to do some sort of study next year, he said, but the scope and agenda needs to be determined. We have discussed the possibility of convening two facilitated workshops, one on technical issues and one on policy issues, said Braun; we're still trying to work toward that. There is still a lot of uncertainty about next year; we don't know what the water supply is going to be, and obviously there are still a number of operational issues that need to be resolved.

Tony Nigro said that, in his view, the draft agendas for the workshops have been briefly discussed, but are far from final. We still need to sit down and talk that through, he said. The only decision we've made so far is to hold September 19 open for a workshop. What we ultimately do on September 19 will depend on who we can get to facilitate the workshop, and what it would be feasible to accomplish in a one-day workshop. What needs to happen next is that the work group needs to be convened very soon, to discuss the September 19 workshop agenda and potential facilitation, said Nigro. We want to see this thing move forward, he said, but it has been very frustrating trying to get the right players together.

It was agreed that it is extremely unlikely that the workshop will be held on September 19; however, it was also agreed to hold the 19th open to at least conduct the subgroup meeting. I think this is just another example of how the crush of business is making it difficult to accomplish some of the things we need to accomplish, as a region, Nigro observed. Braun said he will work with Paul Ocker to move the September 19 meeting forward.

C. Passage Model Development Update. Ruff said he is pleased to report that the collaborative state/tribal/federal model development effort has been launched; there have been several meetings, and two subgroups have been formed. The first is a passage data development team, which will be re-evaluating the complete data set for passage parameters at each FCRPS dam. The next meeting of this group will be September 6. The other subgroup is the passage modeling statistical work group, which will be focusing on reservoir survival, using empirical reach survival data. That group met August 24 to discuss both reservoir survival and how the new model should be calibrated. The next meeting of that subgroup will be September 9 in Seattle, Ruff added.

And what is the timeline for the model development? Denny Rohr asked. We wanted to have a prototype model available by some time in October, Ruff replied; we're continuing to work toward that, but it is a very ambitious schedule, driven by the remand process. The ultimate goal is to have a fully-functional model available by the end of this calendar year, Ruff said. He added that Gary Fredricks is the leader of the passage data development subgroup, while Rich Zabel of the NMFS Science Center is the leader of the passage modeling statistical work group.

4. Planning/Decision-Making Issues.

A. Update on Development of RSW Installation Criteria and Strategy/FY'06 CRFM Program Prioritization. Bill Hevlin said the SCT has now gotten through its prioritization process for the FY'06 CRFM program; there are about 60 line-items on the funding list. State, federal and tribal participation in the prioritization process was high. The FY'06 CRFM work allowance is expected to be about $74 million after savings and slippage, given a total FY'06 appropriation in the low $80 million range. There was

broad consensus among parties on a number of items, including the Little Goose and Lower Monumental RSWs, and surface passage development at McNary and John Day. PIT detection at the B2 corner collector, sea lion exclusion devices, juvenile passage studies at Bonneville and improving spillway passage at The Dalles also enjoyed strong, high-priority consensus, Hevlin said.

The line-items that came in around the $70 million budget figure include the John Day passage studies and estuary studies, both high-cost items, Hevlin said. That's going to be SCT's greatest challenge, he said – how to fit those items into the "funded" category. The cost of the John Day study alone is expected to be at least $6 million in FY'06, Hevlin added. The bottom line is that we've done the majority of the work needed on the FY'06 priorities, he said, but there are still a few funding issues that need to be resolved.

With respect to the surface bypass strategy issue, John Kranda said a Corps team has been meeting since last spring to look at the Corps' overall surface bypass strategy. This effort is being coordinated through SCT, he said. The team has developed a draft report, which addresses whether it might be possible to improve RSW design, perhaps by making future RSWs variable in weir elevation. We're also looking at potential ways to address surface passage at McNary and John Day, possibly through multiple RSW units in combination with guidance screens. The goal is to find a less-costly, more flexible design, possibly even an RSW that could be moved from one bay to another, Kranda said. The report is now out to the region for review, he said; our intention is to make a recommendation on the timeline for Lower Monumental RSW installation by this November. You should be aware, however, that if the surface passage work group recommends significant changes to RSW design, that could mean some delay in the installation of the Lower Monumental and Little Goose RSWs, Kranda said.

Have you considered installing PIT-tag detection within an RSW? Bettin asked. I haven't heard anything specific, although there was a line-item in the FY'06 CRFM spreadsheet that might have addressed that, Kranda replied. That's something you may want to consider including in future RSW designs, Bettin suggested.

One other item, said Hevlin – SCT is working on some decision criteria for the Lower Monumental RSW design and configuration. We will be revising these criteria once all of the information is in from the Lower Granite and Ice Harbor RSW spring and summer RSW tests; once the criteria have been modified, we will bring them to IT, hopefully in time for your November meeting.

Ruff asked the IT members to review the draft "Snake and Columbia River Surface Passage Strategy" document, and to pass any comments on to their SCT members.

B. Spring Creek Spill Reprogramming Presentation. Tim Roth, of USFWS,

led this presentation, titled “Spring Creek NFH Reprogramming.” He noted that this same presentation was provided to BPA and the Corps in June. Roth touched on the following topics:

- A multi-benefit strategy for Columbia River fall chinook production, ESA hatchery reform and operations
- Strategically crafted to achieve multiple benefits – maintain upriver bright (URB) production, allow greater tribal access to URBs in the Zone 6 fishery, maintain tule production, end March spill/special flow operations in aid of the Spring Creek releases, release all John Day mitigation production upriver. This plan would also be more “ESA-friendly,” and would enhance Spring Creek broodstock collection
- This is a partnership program, with USFWS, ODFW and WDFW participating. The program would maintain production of all Columbia River fall chinook stocks; it enjoys broad tribal support as well as NMFS support. The action agencies are involved to resolve hydrosystem issues; recent actions by the USFWS will enhance this partnership.
- Plan uses existing, proven facilities for the best-suited stocks. Tule fall chinook production will continue at Spring Creek. Spring Creek is untested as a URB production facility; disease issues and water temperature are concerns. This proposal would re-start a tule production program at Bonneville State Hatchery, and would increase the URB production at Little White Salmon NFH.
- Proposed production changes – 4.5 million tules from Spring Creek NFH would be moved to Bonneville; 4.5 million URB chinook would be moved to Little White Salmon NFH.
- Releases of fall chinook (table) would be from Spring Creek, Bonneville, Little White Salmon, Ringold Springs, Prosser River and Umatilla River hatcheries
- Facility requirements to accommodate reprogramming – need to develop a combination rearing and acclimation pond at Little White Salmon NFH; upgrade of the Little White Salmon NFH spawning building; need to add an electro-anesthesia system at Little White Salmon NFH; minor equipment purchases. No upgrades necessary at Ringold Springs SH.
- Priest Rapids SH John Day Dam mitigation component caveat: 1.7 million John Day Dam mitigation URBs are currently reared at Priest Rapids SH; the USFWS pays for feed costs, and WDFW conducts the rearing cycle. The FERC relicensing process may change Priest Rapids SH fall chinook production; some or all current John Day mitigation may be displaced to other facilities. The rearing pond at Little White Salmon NFH will be sized to accommodate this potentially-displaced John Day SH production
- FWS efforts at Little White Salmon toward reprogramming implementation – $550,000 to construct the acclimation pond; Fish and Wildlife Service funding has been committed for this project. $14,000 needed for miscellaneous equipment; another $225,000 needed to upgrade the spawning building, hopefully with FY’06 USFWS dollars.
- Benefits of implementation: ecological, economic, management
- Ecological benefits include: reduced straying and hatchery introgression; better

protection for listed chum due to reduced spill and TDG levels below Bonneville; brings Spring Creek releases more in line with natural production characteristics; saves water for later spring migration needs and/or power production.

- Economic benefits include: increased value of tribal mainstem fisheries because prices are higher for URBs; expanded tributary harvest opportunities, including the Drano Lake fishery; maintains the high-value Washington/Oregon Buoy 10 fisheries; saves water for power generation and/or later spring migration needs (S1.3 million-$2.6 million in annual foregone power revenues, assuming 50 Kcfs spill over 5-10 days plus BON-II corner collector flow at $50/MWh)
- Management benefits include: the fact that all U.S. v. Oregon parties are supportive of reprogramming; it would end March spill and special flow operations; it would save water for later spring migration needs and/or power generation; it would simplify chum flow management; it would expand terminal fisheries operations; it would help rectify the fact that passage goals for Spring Creek hatchery fish are not being met under the current operation.
- Cost (including overhead): would save about $23,000 at Spring Creek NFH; no change at Bonneville; it would increase annual costs at Little White Salmon by about $400,000. Total added cost would be about $378,000 per year.
- Funding source/level to implement: USFWS will contribute $789,000 for capital construction needs; $379,000 needed from BPA/COE for annual O&M ($179,000 if project power is provided). Annual O&M costs if 1.7 million Priest Rapids John Day Dam mitigation fall chinook are displaced to Little White Salmon would rise to $453,000 ($253,000 if project power is provided).
- Implementation time frame and ongoing management issues: September 2007 broodstock collection is now the earliest possible time-frame to implement. September 2007 implementation will result in two additional years of Spring Creek March releases and special Bonneville Dam spill operations.

Roth provided the following summary points, noting that the reprogramming proposal:

- Better meets mitigation responsibility
- Implements U.S. v. Oregon production agreement component
- Reduces ESA-related impacts (positive hatchery reform)
- Is a win-win situation for all parties in the region.

Have you identified any permitting/NEPA/Section 7 issues? Marker asked. Our regional office staff did contact our NEPA staff, and from the USFWS NEPA staff's perspective, at least, there are no significant issues, Roth replied. Mike Delarm said NMFS is in the process of consulting with the Fish and Wildlife Service on hatchery issues, and that process should be completed soon. One area regarding URB production will need to be addressed, he said; URBs from Little White Salmon and Bonneville are showing up on the tule spawning grounds and displacing tule redds on the Big White Salmon and other systems. We don't see that problem as insurmountable, however, Delarm said.

What are your plans for future coordination? Braun asked. If you're looking at the Corps and BPA for future funding, we'll need to discuss both potential NEPA issues and future funding needs. I know the regional office received an email from Bob Austin, of BPA, with some additional questions, and we're in the process of responding to those, Roth replied. There will be additional coordination meetings as we proceed, he added. And who needs to say yes to this proposal? Palensky asked – I assume the Corps, for one, plus BPA, NMFS and, possibly, the Council, if F&W Program dollars are needed. Correct, Roth replied.

Bear in mind that BPA and the Corps asked us to develop this proposal, added Howard Schaller – from our perspective, given the level of effort required to develop this proposal, and USFWS's willingness to provide capital funding to get the reprogramming up and running, it is up to the Corps and Bonneville to come up with the annual funding required. It was agreed that the IT will get another update on this topic at its January or February meeting.

5. Regional Forum Process Issues.

A. Long-Term Planning: Review and Update the Implementation Team's Issue Tracking and Schedule Work Sheets. Palensky said he has updated the long-term planning spreadsheet; he asked the other IT participants to review this document and provide any additional items to him as soon as possible. The group briefly reviewed the planned discussion items at the October IT meeting; the only significant change was that the scheduled report on the system flood control study was moved to the November IT agenda.

Silverberg also asked the IT participants to consider what field trips might be desirable in 2006.

6. Next IT Meeting Date.

The next meeting of the Implementation Team was set for Thursday, October 6. Meeting summary prepared by Jeff Kuechle, BPA contractor.